

EDITORIAL

Writing in teams

The truth of the rather hackneyed comment that ‘nutrition is a multidisciplinary science’ is especially evident when one sees the numbers of authors listed on many research papers. There appears to have been a substantial increase in the numbers of papers with very many authors and this multiple authorship has raised some concerns amongst the Editors of scientific journals as to who should actually be regarded as an author. Multiple authorship also raises some important issues about the actual process of writing papers and in identifying the author actually responsible for originating the scientific hypothesis which the paper addresses, who is responsible for the experimental work and, above all, for the interpretation of the experimental findings.

The conventions governing the authorship of a paper have changed considerably since I began research, when I suppose the era of the gentleman scientist was just beginning to fade. The custom then was that only the originators of the ideas behind the work were authors; all the other people who contributed experimentally to the work, whether as professional scientists or as technicians, were dutifully acknowledged in the paper and there were scurrilous documents, widely circulated, that enabled you to read and interpret the acknowledgements in order to identify who did the work at the bench, or in the field, and the statistician who sorted out the data analysis, etc., etc.

Gradually the position changed so that one saw all the professional scientists appearing as authors, although it was still not considered necessary to include the skilled technicians who carried out the experimental work. Not so long ago I can remember being rebuked because I had included an ASO amongst the authors on a paper. Now the situation has changed completely; with many papers all the team involved in a piece of work, however great or small their contribution, are included as authors. Often the order of the authors reflects the importance of their contributions to the paper, although the order of the authors in many papers clearly reflects a subtle hierarchy linked to seniority, usually with the most senior author courteously included at the end. Some institutes, where their researches depended on multidisciplinary teams, adopted the custom of permutating the order of authors to ensure that over the course of time each member of the team achieved first author status.

At the present time when citations are critically important for a scientist’s career, the position as first author is vital and I suspect that in many cases there is much jockeying for position as the paper is written. Where a piece of work would not have been achieved without the contribution of the team it seems rather unfortunate that so much hangs on being first in the list. I often feel sorry for the colleagues of Lowry, for example, and even more for Kjeldahl, who surely must be one of the most highly cited authors not to achieve due recognition in the citation indices!

I have recently returned from the second European Nutrition Leadership Programme where there was great emphasis placed on the importance of working together in teams in nutritional research, and I was intrigued to note that once we moved onto scientific writing everyone was on their own. This set me musing about the process of writing in a team, because if a paper has many authors then, by definition, or possibly inference, a team must have been involved in writing the paper. The actual process of writing is, however, a solitary

activity and I have only met two people who could actually take part in the creative act of writing a scientific paper together. Such a facility depends on a considerable level of mutual understanding between the authors. In other cases the work can be divided so that each author writes their specific part of the paper and the different sections are welded together. This again depends on mutual confidence and respect for each other's discipline and ideas. Where these conditions do not apply, such joint writing can become extremely difficult because of conflicting views and the inability to accept compromise. It is much more common, and I would expect the usual practice, for one person to assemble a first draft and then for his or her colleagues to work on editing and refining the first draft. The time involved in this process is in my experience exponentially related to the number of authors, and I suspect that for many of the multi-authored papers we receive, one or two of those listed have been responsible for the paper submitted.

This brings me back to the question of who is, or should be, regarded as the author, or authors, of a paper. In principle I think that all the people listed as authors are responsible for the paper as a whole and that each one should be able to argue or defend the conclusions in the paper. I take the view shared by some other journals that the act of contributing to the work as such is not sufficient justification for inclusion as an author, but accept that some contributors merit special mention for their technical assistance, rather than just an acknowledgement at the end of the paper. I also recognize that in some institutions and for clinical work involving patients there may be a requirement for a Director or Consultant to be included to demonstrate formal responsibility for the written work.

I think that we should also expect that the first author listed was primarily responsible for writing the paper as a whole. This latter point is very important for many researchers in Continental Europe where published papers form the core of the Doctoral dissertations. However, as a general principle I would like to feel that the 'authors' of a paper are true authors who have contributed substantially to the writing of the paper itself.

D. A. T. SOUTHGATE